

Objectives

Objectives by biophysical setting:

Idaho Batholith Breaklands

1. Within 10 years following Plan approval, vegetation should be treated on about 100,000 acres (13% of the total breaklands acreage) using a combination of prescribed fire, timber harvest and wildland fire use in order to favor drought-tolerant, disease-resistant, shade-intolerant species. These treatments will initiate the restoration process. Restoration activities favor western white pine and ponderosa pine on southerly aspects and western white pine, Douglas-fir, ponderosa pine and western larch on northerly aspects.

Idaho Batholith Uplands

2. Within 10 years following Plan approval, vegetation will be treated on about 16,000 acres (3% of the total uplands), using a combination of timber harvest, prescribed fire or wildland fire use to restore seral species (ponderosa pine, western larch, lodgepole pine and western white pine) and reduce grand fir dominance. These treatments will initiate the restoration process. Restoration includes establishing additional trees of those species; conserving existing large, old trees; conserving younger western white pine by pruning; or favoring retention of these species in thinning.

Idaho Batholith Subalpine

3. Within 10 years following Plan approval, vegetation will be treated on about 47,000 acres (5% of the subalpine acreage) using a combination of timber harvest, prescribed fire or wildland fire use. These treatments will initiate the restoration process. Restoration activities favor whitebark pine at higher elevations; western white pine, ponderosa pine, western larch and Douglas-fir on more moderate sites; or reestablish young lodgepole pine stands. Restoration may also be designed to encourage development of multi-storied subalpine fir stands to provide snowshoe hare habitat.

Bitterroot Mountains Breaklands

1. Within 10 years following Plan approval, treat vegetation on about 84,000 acres (7% of the breaklands) through a combination of timber harvest, prescribed fire or wildland fire use. These treatments will initiate the restoration process. Restoration activities will be designed to favor ponderosa pine, western white pine and western larch where appropriate.

Bitterroot Mountains Uplands

- 2. Within 10 years following Plan approval, treat vegetation on about 22,000 acres (3% of the uplands) through a combination of timber harvest, prescribed fire or wildland fire use. These treatments will initiate the restoration process. Restoration activities will be designed to favor western white pine establishment on moist sites; conserving existing large, old ponderosa pine on drier sites or establishing additional ponderosa pine; and conserving large, old western larch where it occurs and while establishing additional larch on appropriate sites. This may also include favoring the desired species during thinning in young stands.**

Bitterroot Mountains Subalpine

- 3. Within 10 years following Plan approval, treat vegetation on about 89,000 acres (10% of the subalpine setting) through a combination of timber harvest, prescribed fire or wildland fire use. These treatments will initiate the restoration process. Activities will be designed to favor restoration of whitebark pine at higher elevations; western larch and Douglas-fir on more moderate sites; or reestablish young lodgepole pine stands. Restoration may also be designed to encourage development of multi-storied subalpine fir stands.**

Guidelines:

1. In order to promote fire-resistant, resilient forests on the breaklands:
 - a. Where scattered large, old ponderosa pine are found, they should be retained, and/or the regeneration of additional ponderosa pine encouraged where it has been lost.
 - b. Ponderosa pine forest structure should be restored to open, single-storied forests.
 - c. Size class distributions should be restored on north aspects. This may be accomplished by reducing large and medium size classes and increasing small size classes and the seral shrub component.
 - d. Seral grasses and shrubs should be increased on southerly aspects, primarily by reducing tree density and using fire to reinvigorate decadent shrubs and grasses.
 - e. On north aspects emphasis should be on decreasing grand fir or cedar dominance while increasing shade-intolerant species such as western white pine, ponderosa pine, western larch and Douglas-fir.
 - f. Planting or planning for natural regeneration of western white pine, ponderosa pine, Douglas-fir or western larch should be encouraged where appropriate, and culturing with fire or mechanical methods should be used to encourage development of large trees with single- or two-storied stand structure.

2. In order to promote fire-resistant forests on the Uplands, that are resilient to disturbance and potential climate change:
 - a. Disturbances should be planned to produce larger patches of seral shrubs, and the small size class.
 - b. Planting or planning for regeneration of seral species, particularly western white pine, ponderosa pine, and western larch, should also be encouraged where appropriate.
 - c. Grand fir and cedar dominance should be reduced.
 - d. The large and small size classes, as well as seral shrubs, should be increased while the middle size class is decreased.
 - e. Stand densities should be reduced while favoring shade-intolerant species, generally old ponderosa pine, western larch, western redcedar and western white pine in addition to grand fir needed to meet desired conditions.
 - f. Oldest forests, particularly very large, very old western redcedar, grand fir, ponderosa pine and western larch, should be conserved.
 - g. Treatments should be designed to encourage development of large trees with single- or two-storied stand structure.
3. In order to promote resilient forests on the Subalpine areas:
 - a. Reestablishment of whitebark pine killed by mountain pine beetle or white pine blister rust should be promoted as opportunities arise on appropriate sites.
 - b. Western larch and Douglas-fir should be encouraged on moderate Subalpine sites to increase fire-resistance and resilience, and promote forest diversity.
 - c. Subalpine fir, Engelmann spruce, and mountain hemlock dominance should be reduced as opportunities arise in order to reduce fire susceptibility, and promote forest diversity.
4. In order to improve ecosystem resiliency on all biophysical settings:

Extent	Options to consider in project planning:
<u>Landscape</u>	
	In order to limit the extent of very large, uncharacteristic disturbances, create a more diverse landscape pattern of size classes, species, and patch sizes.
<u>Tree species</u>	
Ponderosa pine	Reduce forest density in all successional stages
	Consider opportunities to plant ponderosa pine after regeneration harvests or wildfire.
	Planting on winter ranges should aim for no more than 100 established (5+ year-old) trees per acre in order to encourage long-term browse production.
Douglas-fir	Reduce forest density in all successional stages on breaklands
	On north aspect breaklands, and all upland and subalpine

	sites, after regeneration harvests or wildfire, consider ways to encourage western white pine, ponderosa pine and larch where they occurred historically to reduce impacts of root disease
	In order to improve resiliency to potential climate change, plan projects to maintain lower forest density during all stages of succession
Grand fir	On north aspect breaklands, and all upland and subalpine sites, after regeneration harvests or wildfire, consider ways to encourage western white pine, ponderosa pine and larch where they occurred historically to reduce impacts of root disease
Western Redcedar	In order to improve resiliency to potential climate change, plan projects to only encourage western redcedar on the moistest of the cedar and western hemlock habitat types.
Western Hemlock	On north aspect breaklands, and all upland and subalpine sites, after regeneration harvests or wildfire, consider ways to encourage western white pine, ponderosa pine and larch where they occurred historically to reduce impacts of root disease
White pine	Plan projects to aggressively plant rust resistant white pine after regeneration harvests or wildfire on moist western redcedar and western hemlock habitat types.
	In order to maintain white pine, thin and prune young stands to favor white pine.
Whitebark pine	Consider planting of rust resistant stock in areas of limited seed source as opportunities arise.
	Use wildland fire as opportunities arise to restore the pattern of WBP successional stages and provide opportunity for natural regeneration where selection pressure with white pine blister rust has resulted in resistant seed producers.
Spruce	Consider the potential effects of warming climate in project planning, and favor spruce through harvest methods and/or reforestation choices on northerly aspects and more moist sites.
Subalpine fir	Consider the potential effects of warming climate in project planning, and favor subalpine fir through harvest methods and/or reforestation choices on northerly aspects and more moist sites.
Larch	Consider the potential effects of warming climate in project planning, and favor western larch through harvest methods and/or reforestation choices on cooler and more moist sites.
	In order to maintain established larch, plan projects to manage forest density to favor larch during all successional stages
Mtn. Hemlock	Consider the potential effects of warming climate in project planning, and favor mountain hemlock through harvest methods and/or reforestation choices on northerly

	aspects and more moist sites.
Lodgepole	Manage for landscape heterogeneity of pattern of successional stages